

instead of greenish; very much more green on sides of breast and body, the white of the under parts, especially of the throat and jugulum, being confined to a narrow central space; upper mandible light reddish at the base instead of black as in *cyaneicollis*.

Type, ♂ adult (No. 24,125, collection of William Brewster, Nacosari, Sonora, Mexico, March 31, 1887, J. C. Cahoon): Top and sides of head, with sides of neck, glittering blue; remainder of upper parts rather dull, dark, but shining green, somewhat obscured by drab on the rump and upper tail-coverts; shoulders and wing-coverts green like the back but all the quills dark hair brown with a faint gloss of purplish; tail dark glossy green, the outer pair of feathers broadly tipped with drab; under parts soiled white, the middle of the throat tinged with clayey buff (a stain, probably), the feathers along its sides with large, crescent-shaped, sub-terminal spots of blue; sides of the breast greenish blue; sides of the body brilliant green; bill (in the dried specimen) dull reddish brown or brownish orange, lightest at the base, deepening to horn color at the tip. Wing, 2.07 inches; tail, 1.27; length of culmen from base, 1.02; from feathers, .88; width of bill at base, .13.

I have compared this specimen — which as far as known is unique — with six Peruvian examples (including the type) of *cyaneicollis* in the collection of the British Museum. Although in general coloring it bears a closer resemblance to this species than to any other of the genus, Mr. Salvin is of the opinion that its true relationship is with *C. quadricolor* (= *C. ellioti* Berl). From the latter, however, as well as from *C. violiceps*, it differs very decidedly in the brighter green of the neck and back, in the blue instead of purplish reflections on the crown, and in the blue or greenish on the sides of the neck and body. It is smaller than *C. cyanocephala*, with a shorter tail, and white instead of gray under tail-coverts.

DESCRIPTION OF A NEW MARSH WREN, WITH CRITICAL NOTES ON *CISTOTHORUS* *MARIANÆ* SCOTT.

BY WILLIAM BREWSTER.

IN 1888 Mr. W. W. Worthington sent me some odd-looking Marsh Wrens from Sapelo Island, Georgia. They were evidently not *C. palustris*, and as they agreed in several respects with Mr.

Scott's description of *C. marianæ* I referred them¹ to the latter without much hesitation, attributing certain peculiarities which they exhibited to individual variation.

At the time I had only two specimens of *marianæ*. There are now before me forty, of which five, including the types, have been kindly loaned by Mr. Allen from the collection of the American Museum, while one has been supplied by Mr. Manly Hardy, the remaining thirty-four being contained in my own collection. Of the total number, two were taken at Cedar Keys and thirty-eight at Tarpon Springs, Florida. Of the supposed *marianæ* from our south Atlantic coast I have now ten specimens (a list of which will be given later) and of *C. palustris* no less than eighty-six skins, including many winter specimens from our Southern States and illustrating certainly all the seasonal, and probably most of the individual and geographical, variations to which the last-named species is subject.

This material shows conclusively that the peculiar Marsh Wrens from Georgia and South Carolina, just alluded to, are quite distinct from *marianæ* and represent a strongly characterized form which may be described as follows:—

Cistothorus palustris griseus, new subspecies. WORTHINGTON'S MARSH WREN.

Subspecific characters: Of the size and proportions of *C. marianæ* but with less black above and no distinct dark markings on the under tail-coverts, flanks, sides or breast. General coloring very much paler and grayer than in either *marianæ* or *palustris*. Bill colored as in *C. marianæ*.

Type, ♂ (No. 19,008, collection of William Brewster, Sapelo Island, Georgia, Nov. 17, 1887, W. W. Worthington): Above including the wings, tail, and the sides of the head and neck, hair brown with the faintest possible tinge of reddish on the hind back, rump, and upper tail-coverts; sides of crown clove brown; the feathers over a short, narrow area on the middle of the back dull black with narrow white shaft streaks; inner secondaries edged with blackish; upper tail-coverts and middle tail-feathers with indications of

¹ The specimens here mentioned were recorded by me in the Auk (Vol. V, no. 4, Oct., 1888, p. 432) as *C. marianæ*, and this form was afterwards reported from Charleston, South Carolina, by Mr. Wayne (Auk, Vol. VIII, no. 2, April, 1891, p. 239) and by Mr. Ridgway (ibid., p. 240). I have not seen Mr. Ridgway's bird, but Mr. Wayne's—for the identification of which I am responsible—was similar to the specimens taken in Georgia by Mr. Worthington.

dusky bars, appreciable only in a good light; outer two pairs of tail-feathers with broad, continuous, and perfectly distinct dark bands; middle of throat and abdomen pure white; remaining under parts pale grayish brown more or less tinged with pinkish on the jugulum and sides; under tail-coverts whitish with very faint, confused, transverse markings of reddish brown; similar but still fainter reddish markings on the breast and flanks; a fairly well defined, whitish, superciliary stripe. Bill uniform dark horn color, lightening only at the extreme base of the lower mandible where it is brownish flesh-color.

The small size, short wings, slender bill, dark under mandible, and clouded breast of this form, indicate that it is most nearly related to *marianæ*, despite the fact that its general coloring is even paler and more uniform, and its dark markings are less pronounced, than in *palustris*, whereas *marianæ* is decidedly the deepest colored and most boldly marked of the three. In respect to the coloring of the upper parts Mr. Scott's types do not represent his bird at all fairly, for they are exceptional in having rather less and duller black on the crown and back than is usually found in *palustris*. Average specimens of *marianæ* have more black than *palustris*, and the dark extremes show little or no trace of the usual light area on the centre of the crown, practically the whole top of the head, as well as the nape, being solidly black.

The dark bars of the rump and upper tail-coverts, although usually present and often conspicuous, are nearly or quite wanting in some otherwise typical specimens of *marianæ*, but the conspicuous barring of the under tail-coverts is very constant and affords one of the best characters of this form.

My specimens of *griseus* exhibit a good deal of individual variation; but with the exception of one bird, which has a few distinct blackish spots on the flanks and sides of the breast, they maintain very uniformly the characters mentioned in the above diagnosis. Several are even grayer and less marked than the type, and Mr. Hardy's bird (♂, McIntosh Co., Georgia, Feb. 1, 1893, W. W. W.) actually lacks nearly all trace of the usual black areas on the head and back, the uniform grayish brown of the upper parts being diversified only by a scarcely appreciably dusky stripe on each side of the crown and a few minute, half-concealed, whitish spots on the interscapulars. In the general coloring of the under parts *C. p. griseus* bears a curiously close resemblance to the

gray extreme of *Troglodytes a. aztecus*. Indeed I find it possible to select specimens of the two which, when laid side by side on their backs, are scarcely distinguishable by color alone.

For comparison with the following measurements of the ten specimens of *griseus* I have added these of an equal number of representatives of *marianæ* and *palustris* selected quite at random from the large series before me. The measurements are in inches.

C. p. griseus.

Cat.No. Col.W.B.	Sex	Locality	Date	Wing	Tail	Tars.	Cul. from feathers	Cul. from nostril	Depth of bill at nostril
42,104		Mt. Pleasant, S. C.	Mar. 9, 1891	1.72	1.41	.69	.50	.41	.13
42,013	♂	" " "	Oct. 14, "	1.79	1.54	.76	.50	.40	.12
—	♂	McIntosh Co., Ga.	Feb. 1, 1893	1.94	1.66	.77	.57	.41	.12 ¹
19,008	♂	Sapelo Island, Ga.	Nov. 17, 1887	1.84	1.62	.75	.50	.38	.12 ²
19,007	♂	" " "	" " "	1.82	1.51	.77	.50	.38	.12
19,009	♂	" " "	Dec. 14, "	1.92	1.68	.77	.54	.44	.13
19,012	♂	" " "	" " "	1.84	1.57	.73	.53	.44	.12
19,010	♀	" " "	Jan. 28, 1888	1.66	1.32	.71	.43	.37	.11
19,011	♀	" " "	Dec. 3, 1887	1.72	1.54	.73	.50	.38	.12
—	♀	McIntosh Co., Ga.	Jan. 23, 1890	1.74	1.52	.70	.50	.40	.11

C. p. marianæ.

—	♂	Tarpon Sp'gs, Fla.	Jan. 6, 1888	1.87	1.69	.73	.50	.40	.12 ³
27,161	♂	" " "	" " 1890	1.90	1.79	.73	.54	.42	.12
27,163	♂	" " "	" 9, "	1.86	1.63	.77	.56	.42	.12
27,165	♂	" " "	" 13, "	1.92	1.74	.75	.52	.41	.13
27,164	♂	" " "	" " "	1.92	1.71	.71	.53	.40	.12
27,169	♂	" " "	Dec. 30, 1889	1.91	1.80	.70	.54	.44	.12 ⁴
—	♀	" " "	Feb. 9, 1888	1.98	1.70	.73	.52	.41	.12
—	♀	" " "	Jan. 5, "	1.85	1.57	.73	.48	.37	.12 ⁵
27,172	♀	" " "	" 6, "	1.82	1.62	.73	.53	.42	.13
27,180	♀	" " "	Feb. 28, "	1.80	1.73	.72	.50	.42	.13

C. p. palustris.

13,879	♂	Near Concord, Mass.	June 7, 1887	2.05	1.78	.77	.51	.38	.13
13,876	♂	" " "	" " "	1.95	1.69	.72	.54	.40	.13
42,183	♂	New Haven, Conn.	May 19, 1891	1.92	1.75	.78	.51	.38	.13
42,184	♂	" " "	" " "	1.95	1.78	.80	.50	.38	.13
14,223	♂	Yemassee, S. C.	Jan. 4, 1888	2.05	1.74	.80	.56	.43	.12
12,137	♂	Near Charleston, S. C.	Nov. 9, 1886	2.07	1.86	.79	.54	.41	.12
12,774	♂	Kankakee Marshes, Ind.	Apr. 27, 1886	2.11	1.86	.80	.52	.40	.13
13,893	♂	Near Concord Mass.	June 7, 1887	1.90	1.68	.73	.50	.37	.11
13,895	♀	" " "	" 17, "	1.87	1.60	.75	.50	.39	.12
14,225	♀	Yemassee, S. C.	Jan. 4, 1888	1.98	1.73	.79	.51	.40	.12

¹ Coll. M. Hardy.

⁴ Am. Mus. no. 30,197.

² Type.

⁵ Tail partly gone. Type. Am. Mus. no. 30,194.

³ Am. Mus. no. 30,195.

The essential points of difference between the three eastern forms of the Long-billed Marsh Wren may be tabulated as follows:—

A.—Size larger, bill stouter, the basal third or more of the lower mandible flesh-colored. Brown of sides, flanks and upper parts clear reddish. White of lower parts usually continuous from chin to crissum.—*C. palustris*.

B.—Size smaller, bill slenderer, the lower mandible horn-colored with, at most, only the extreme basal portion flesh-colored. White of lower parts usually interrupted by a band of dusky grayish or reddish spots or clouding across the breast, and elsewhere confined to a comparatively narrow central space by the encroachment of the brown or grayish of the sides.

1.—Black of the upper parts usually deeper and more extended than in *palustris* and frequently covering practically the entire crown, nape and most of the back. Brown of sides, flanks, and upper parts deep and rusty with a tinge of olive. Under tail-coverts and frequently the flanks, sides, and breast also, boldly marked with black or dusky spots or bars.—*C. p. marianæ*.

2.—Black of upper parts much duller and less extended than in *palustris*, usually confined to the extreme sides of the crown and a short narrow area in the middle of the back, and in extreme specimens almost wholly absent. Brown of sides, flanks, and upper parts pale and grayish. Dark markings of the under tail-coverts, flanks, sides, and breast faint, confused and inconspicuous, sometimes practically wanting.—*C. p. griseus*.

Whether or no *C. p. marianæ* and *C. p. griseus* intergrade, and what are their respective habitats during the breeding season, are points on which my material throws no light. Intergradation is certainly probable, but by no means certain, for if, as seems not unreasonable, we may assume that *marianæ* is resident on, and confined to, the Gulf Coast, and *griseus* equally restricted, at all seasons, to the South Atlantic seaboard, their respective habitats may be, for birds of such sedentary habits, practically isolated. If this should prove true, one of the most curious features of the case will be the fact that so very pale a form as this new Wren has been developed in the salt marshes of Georgia and South Carolina, where its associates, the Seaside Finches and Clapper Rails, although of not dissimilar general coloring, are somewhat darker, instead of much grayer, than their more northern representatives.